

Turova-Polyak, M. B. and Sidel'kovskaya, F. P.
ISOMERIZATION OF POLYMETHYLENE HYDRO-
CARBONS. VIII. THE ACTION OF ALUMINUM
CHLORIDE. VIII. ISOMERIZATION OF HEXAHY-
DROMETHYLENE. [1961] 3p. 8 refs.
Order from OTS or SLA \$1.10 61-18016

Trans. (Zhurnal Obshchei Khimii (USSR) 1941, v. 11
[no. 10] p. 821-823.

DESCRIPTORS: *Hydrocarbons, *Cyclohexanes,
*Molecular isomerism, Methyl radicals, Aluminum
compounds, Chlorides.

The process of isomerization of hexahydromesitylene
with aluminum chloride was investigated. Interaction of
aluminum chloride with hexahydromesitylene gives a
mixture of hydrocarbons of which 88% consist of cyclo-
hexanes (including hexahydromesitylene), 9% of cyclo-
pentanes and 3% of paraffins. The group composition of
the isolated hydrocarbons confirms the previously made
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18016

- I. Turova-Polyak, M. B.
- II. Sidel'kovskaya, F. P.
- III. Title: Isomerization of
Hexahydromesitylene

Office of Technical Services

Turova-Polyak, M. B. and Vsevolozhskaya, E. V.
ISOMERIZATION OF POLYMETHYLENE HYDRO-
CARBONS UNDER THE ACTION OF ALUMINUM
CHLORIDE. I. ISOMERIZATION OF 1, 2-DIMETHYL-
CYClopENTANE. [1961] 5p. 22 refs.
Order from OCS or S.A. \$1.10

CI-15015

Trans. *Chem. Zhurnal* (USSR) 1941, v. 11
[no. 10] p. 123-126.

DESCRIPTORS: *Hydrocarbons, *Cyclopentanes,
*Molecular isomerism, Aluminum compounds,
Chlorides.

The process of isomerization of 1, 2-dimethylcyclopentane under the action of aluminum chloride was investigated. It was established that 96.7% methylcyclohexane is formed by isomerization of 1, 2-dimethylcyclopentane. It was shown that the presence of two substituent groups in the molecule of cyclopentane does
(Chemistry-Organic, IT, v. 6, no. 7) (over)

CI-18015

- I. Turova-Polyak, M. B.
- II. Vsevolozhskaya, E. V.
- III. Title: Isomerization of 1, 2-Dimethylcyclopentane

Office of Technical Services

Investigation of the Alkaloids of Senecio Othonnae, by
E. S. Zhdanovich, G. P. Men'shikov, 7 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XI, No 10, 1941,
pp 835-838.

28,992

Sci Tr Center
EX RT-2255

Scientific - Chemistry

Doc: 55 CTS/DEX

Acridyl-9-(omega-haloidmethylketone). II. Pro-
duction of 2-methoxy-6-chloracridin, by G. I. Braz,
3 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XI, No 10,
1941, pp 851-858.

Sci Trans Center
RT-1379

14,625

Scientific - Chemistry

Dec 54 CTS/DEK

Equilibrium in the System Urea-Monoammonium
Phosphate-Water, by V. P. Hindin, 7 pp.

RUSSIAN, per, Zhur Obshchei Khim, Vol XI, 1941, pp
887-890.

SLA R-2855

Sci

Jul 59

92, 395

The Kinetics and the Mechanism of the Oxidation-
Reduction Reactions. VI. The Kinetics
of the Oxidation Reaction of the Ferrocyanide by
Bichromate; The Jet Method, by V. F. Stefanovskiy.
RUSSIAN, per, Zhur Obshch Khim, Vol XI, 1941,
pp 968-969.
AEC-18-Tr-16

Sci-Chem
Jul 68

282,621

Delimarskii, Yu. K.
EQUILIBRIUM BETWEEN SOME MOLTEN METALS
AND THEIR BROMIDES IN ALUMINUM BROMIDE-
POTASSIUM BROMIDE AS SOLVENT. [1962] 21p.
Order from K-H \$26. 25

K-H 5866 g

Trans. of Zhurnal Obshchei Khimii (USSR)
1941, v. 11, no. 13/14, p. 1081-1091.

DESCRIPTORS: *Liquid metals, *Aluminum compounds,
*Potassium compounds, *Bromides,
Chemical equilibrium.

CFST! TT 64-18404

(Chemistry--Physical, TT, v. 9, no. 11)

63-12934

- I. Delimarskii, Yu. K.
- II. K-H-5866-g
- III. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

Office of Technical Services

Petrov, A. D. and Shchukin, V. I.
ISOMERIZATION OF NORMAL HEPTENE TO
METHYLDIETHYLETHYLENE AND OF NORMAL
OCTENE TO DIMETHYLBUTYLETHYLENE. [1961]
Sp. 8 refs.
Order from OTS or SLA \$1.10 61-16934

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1092-1095.

DESCRIPTORS: *Olefins, Isomerism, Chain reactions,
*Ethylenes, *Hydrocarbons, Raman spectroscopy,
Heptenes, Methyl radicals, Ethyl radicals, Butyl
radicals.

Isomerization of normal 1-heptene to methyldiethyl-
ethylene and of normal 1-octene to dimethylbutylethyl-
ene was established. The difference in the schemes of
isomerization of normal olefins into branched chain
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16934

I. Petrov, A. D.
II. Shchukin, V. I.

185467

Office of Technical Services

Petrov, A. D., Verentsova, N. I., and
Kokleeva, T. A.
SYNTHESIS OF 2-METHYL-4-HEXYNE AND
2,6-DIMETHYL-3-HEPTYNE. [1961] 5p. 12 refs.
Order from OTS or SLA \$1.10 61-16935

Trans. of Zhurnal Obshchei Khimii (USSR) 1941,
v. 11, p. 1096-1099.

DESCRIPTORS: Hydrocarbons, Synthesis, Antiknock,
*Fuels, Methyl radicals, *Heptynes, *Hexynes.

Synthesis of two new hydrocarbons is reported,
2-methyl-4-hexyne and 2,6-dimethyl-3-heptyne. Anti-
knock properties of acetylenic hydrocarbons have been
evaluated. (Author)

(Chemistry--Organic, TT, v. 6, no. 9)

61-16935

I. Petrov, A. D.
II. Verentsova, N. I.
III. Kokleeva, T. A.

005408

Office of Technical Services

61-16936

Petrov, A. D. and Karlik, L. D.
SYNTHESIS OF GLYCOLS OF THE ACETYLENE
SERIES. [1961] 5p. 16 refs.
Order from OCS or SLA \$1.10

61-16936

I. Petrov, A. D.
II. Karlik, L. D.

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1100-1103.

DESCRIPTORS: *Glycols, Synthetics, *Acetylenes,
Alcohols, Antiknock.

Synthesis of three acetylenic γ -glycols is reported:
5-decyne-4, 7-diol, 9-octadecyne-8, 11-diol, 10, 13-
dimethyl-11-docosyne-10, 13-diol. The method of
synthesis of glycols and alcohols of the acetylene
series suggested by L. Kazaryan was tested. Anti-
knock properties of acetylene alcohols and their sus-
ceptibility to tetraethyllead was studied. (Author)

(Chemistry--Organic, TI, v. 6, no. 7)

Office of Technical Services

61-16937

Petrov, A. D., Pavlov, A. M., and Makarov, Yu. A.
SYNTHESIS OF 3-ETHYLDECANE AND 2,5-DI-
METHYLUNDECANE. [1961] 3p. 4 refs.
Order from OTS or SLA \$1.10

61-16937

I. Petrov, A. D.
II. Pavlov, A. M.
III. Makarov, Yu. A.

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1104-1106.

DESCRIPTORS: Synthesis, Antiknock, Halogenation,
*Hydrocarbons, Chain reactions, *Fuels, Ethyl
radicals, Methyl radicals.

Syntheses of two new paraffins are reported, 3-ethyl-
decane and 2,5-dimethylundecane. Antiknock properties
and pour points of three normal and branched chain
paraffins with 12 and 13 carbon atoms have been
evaluated. (Author)

(Chemistry--Organic TT, v. 6, no. 9)

005409

Office of Technical Services

Petrov, A. D. and Lapeva, E. I.
SYNTHESIS AND PROPERTIES OF SOME HIGHER
HOMOLOGS OF BENZENE. [1961] 5p. 12 refs.
Order from CTS or SIA \$1.10 61-16938

Trans. of Journal Obshchei Khimii (USSR) 1941, v. 11,
p. 1107-1110.

DESCRIPTORS: Benzene, Synthesis, Antiknock,
Chain reactions, Hydrocarbons.

Three new homologs of benzene with branched side
chains were synthesized: methyldecylphenylmethane,
ethylundecylphenylmethane and dimethylpentadecyl-
phenylmethane. Antiknock properties of these and some
other representatives of the series $C_{10}H_{18}R$ with
branched and normal paraffin chains were evaluated.
(Author)

(Chemistry--Organic, IT, v. 6, no. 7)

61-16938

I. Petrov, A. D.
II. Lapeva, E. I.

10175

Office of Technical Services

Org-analogs of Aneurin(Vitamins B-1),
by Y. M. Slobodin, M. S. Zeigel, 7p.
RUSSIAN, per, Zhurnal Meditsinskoi Khimii,
Vol 11, No 12, 1941, pp 1019-1022.
OTS TT-65-6005

333, 592

Sci
Jul 67

The Condensation of Acetylene With Ketols, by
A. E. Favorskiy, A. S. Onishchenko.

RUSSIAN, per, Zhur Obshch Khim, Vol XI,
No 13/14, 1941, pp 1111-1120.

DSIR LLU M.1337
(loan)

Sci - Chem

Oct 60

SLA 60-10763

128,907

Kazanski, B. A., Liberman, A. L. and others.
RELATIVE EFFICIENCIES OF LABORATORY DIS-
TILLATION COLUMNS OF DIFFERENT CONSTRUC-
TION. [1961] 10p. 25 refs.
Order from CTS or SLA \$1.10

61-16657

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 112-125.

DESCRIPTORS: *Towers (Chemistry), Liquids,
Mixtures, Separation, Distillation plants.

An experimental comparison of a number of fractionat-
ing columns, including those designed by Lebel,
Vigreux, Arbuzov, Wilmer, Dobryanski and Gal'pern,
Wilson and Fenske, revealed that a column packed with
glass helices forming a layer 140-150 cm high is more
efficient than the other dephlegmators tested. When the
packing was divided into three sections separated by
pieces of glass tubing, the height equivalent to one
theoretical plate was 5.8 cm, i.e., the number of
(Engineering--Chemical, TT, v. 6, no. 6) (over)

61-16657

I. Kazanski, B. A.
II. Liberman, A. L.

176564

Office of Technical Services

Research on dehydration of alcohols containing a nitrogen ring in the molecule is of great interest. From methylphenylethylcyclohexanol, methylphenylcyclohexylidenemethane was obtained and, in the case of anhydrous calcium chloride and phosphorus pentoxide, carbazole, benzylidenephosphorane, and phosphorane hexahydrocyclohexylidene. The same phosphorane compound was obtained from methylphenylcyclohexanol, ethylidenecyclohexane. Methylphenylcarbinol could not be dehydrated with SO_2 , formic acid, potassium bisulfate or phosphorus or chromium trioxide acid.

I Verus-Danilova, E. D.
II Bol'shukhin, A. I.

Office of Technical Services
Industry--Physical,
C. P. no. 71

Petrov, A. D. and Chel'tsova, M. A.
SYNTHESIS AND PROPERTIES OF AROMATIC AND
NAPHTHENIC HYDROCARBONS WITH FROM 19 TO
26 CARBON ATOMS, II [1961] 7p. 17 refs.
Order from OTS or SLA \$1.10 61-16637

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 87-94.

DESCRIPTORS: *Fuel oil. *Benzenes, *Cyclohexanes,
Naphthalenes, *Hydrocarbons, Synthesis, Chemical
properties, Alkyl radicals.

Synthesis of 12 hydrocarbons with from 19 to 26 carbon
atoms is reported, mainly monoalkylbenzenes and
monoalkylcyclohexanes. Physical constants and the
most important technical properties characterizing
these hydrocarbons as Diesel fuel constituents have
been evaluated. (Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16637

I. Petrov, A. D.
II. Chel'tsova, M. A.

Office of Technical Services

Petrov, A. D. and Kaplan, E. P.
SYNTHESIS AND PROPERTIES OF ISOPARAFFIN
HYDROCARBONS OF THE COMPOSITION $C_{12}-C_{22}$
COMMUNICATION 2. [1963] 9p. 13 refs.
Order from OTS or SLA \$1.10

63-16801

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12
[no. 1/2] 5-103.
An abstract trans. is available from OTS or SLA \$1.60
as 61-20323 [1961] 18p.

DESCRIPTORS: *Alkanes, *Alkenes, *Ethyl radicals,
*Methyl radicals, *Butyl radicals, Hydrocarbons,
Physical properties, Chemical properties, Bromides,
Synthesis (Chemistry).

The following hydrocarbons were synthesized for the
first time: 4,5-diethyloctane, 2,7-dimethyl-4,5-
diethyloctane, 7,8-diethyltetradecane, 5,6-dibutyl-
(Chemistry--Organic, 7T, v. 10, no. 7) (over)

63-16801

I. Petrov, A. D.
II. Kaplan, E. P.

Office of Technical Services

Kazanskii, B. A., Liberman, A. L. and others.
RELATIVE EFFICIENCIES OF LABORATORY FRAC-
TIONATING OF VARIOUS CONSTRUCTIONS. [1963]
23p. 25 refs.

Order from OTS or SLA \$2.60

63-16037

Trans. of Zhurnal Obshchei Khimii (USSR) 1942,
v. 12, p. 112-122.

Another trans. is available from OTS or SLA \$1.10 as
61-16657 [1961] 10p. and an abstract trans. \$1.60 in
61-20323 [1961] 18p.

DESCRIPTORS: "Towers (Chemistry), "Distilling
plants, Construction, Design, Effectiveness,
"Fractionation.

For abstract see Technical Translations 6: 417, 1961.

(Engineering--Chemical, TT, v. 10, no. 6)

63-16037

I. Kazanskii, B. A.
II. Liberman, A. L.

Office of Technical Services

62-20386

I. Balandin, A. A.

Balandin, A. A.
KINETICS OF CATALYTIC MONOMOLECULAR
REACTIONS IN A FLOW SYSTEM, WITH DISCOUNT
OF DISPLACEMENT THROUGH ALIEN SUBSTANCES.
[1962] 8p. 10 refs.

Order from OTS or SLA \$1.10

62-20386

Trans. of Zhur[nal] Oshchei Khim[i] (USSR) 1942,
v. 12, no. 3/4 p. 153-159.

An abstract trans. is available from OTS or SLA \$1.10
in 61-20325 [1961] 5p.

DESCRIPTORS *Reaction kinetics, *Catalysis, Fluids,
Pressure, Dehydrogenation, Alcohols, Molecular
isomerism.

A kinetic equation was deduced and solved for a
general case mentioned in the title (steady state).
Some admissible simplifications were examined. Re-
(Chemistry-Physical, TIT, v. 9, no. 12) (over)

Office of Technical Services

Theory of Heat Capacities of Ions in Solution, by
A. F. Kapustinskiy, 10 pp.

RUSSIAN, ~~as~~ bimo per, Zhur Obshch Khim, Vol XII,
No 3-4, 1942, pp 186-192.

Sci Tr Center RT-328

Scientific - Chemistry

10,138

Medvedchuk, P. I., Aldoshin, T. D. and others.
REACTIONS OF IODINE, IODINE CHLORIDE AND
THIOCYANOGEN WITH HYDROCARBONS OF
NATURAL AND SYNTHETIC RUBBERS. [1961] 7p.
23 refs.

Order from OTS or SLA \$1.10

61-16638

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 220-226.

DESCRIPTORS: Iodine, Iodine compounds, Chlorides,
Hydrocarbons, *Rubber, *Synthetic rubber, Chemical
reactions, Thio radicals, Cyanogen.

Interaction of solutions of iodine, iodine chloride and
thiocyanogen with solutions of natural and synthetic
sodium-butadiene rubber were investigated. Data were
obtained proving beyond doubt the analogous properties
of the hydrocarbons investigated. However, their
chemical activities differ, due to differences in struc-
ture. Addition products of halogens and thiocyanogen to
(Materials--Rubber, IT, v. 6, no. 6) (over)

61-16638

I. Medvedchuk, P. I.
II. Aldoshin, T. D.

176563

Office of Technical Services

Nametkin, S. S. and Teneva, R. S.
NEUTRAL PRODUCTS OF OXIDATION OF PARAFFIN
WAX WITH OXYGEN OF THE AIR [1961] 9p. 10 refs.
Order from OTS or SLA \$1.10 61-16666

Trans. of Zhurnal Obshchei Khimii (USSR) 1942,
v. 12, p. 229-239.

DESCRIPTORS: *Synthetic waxes, Oxidation, Oxygen,
Air, Aldehydes, Alcohols, Peroxides.

Investigation of the neutral products of oxidation of
paraffin wax, with oxygen of the air established that
they contain straight chain aldehydes from butyric to
stearic, inclusive, and primary alcohols from propyl
to octadecyl, inclusive. The mechanism of oxidation of
paraffin wax with oxygen of the air is discussed, show-
ing that the entire factual material available can be
interpreted from the point of view of the peroxide
theory. (Author)

(Chemistry--Physical, TT, v. 6, no. 6)

61-16666

I. Nametkin, S. S.
II. Teneva, R. S.

176507

Office of Technical Services

Nikolaeva, A. F.
HYDROGENATION OF METHYL CYCLOPENTANE
AND CYCLOHEXANE UNDER HYDROGEN PRESSURE,
[1961] 6p. (4 refs.)
Order from OTS or SIA \$1.10

61-16639

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 240-243.

DESCRIPTORS: *Hydrogenation, *Cyclopentanes,
*Cyclohexanes, Hydrocarbons, Hexanes, Methyl
radicals.

Hydrogenation of methylcyclopentane at 400° and an
initial hydrogen pressure of 140 atm in the presence
of molybdenum sulfide brought about a conversion of
this hydrocarbon to normal hexane, isohexane and 3-
methylpentane. Simultaneously with hydrogenation,
isomerization of methylcyclopentane occurred, forming
cyclohexane. Investigation of the products of hydro-
genation of cyclohexane revealed that with increase of
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-16639

I. Nikolaeva, A. F.

Office of Technical Services

61-16640

Kazanskii, B. A. and Rozengart, M. L.
CATALYTIC POLYMERIZATION OF BUTENES OVER
ALUMINUM SILICATE. IL [1961] 10p. 12 refs.
Order from OTS or SLA \$1.10 61-16640

I. Kazanskii, B. A.
II. Rozengart, M. L.

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 246-254.

DESCRIPTORS: *Butenes, Polymerization, Aluminum
compounds, *Silicates, Catalysts.

(Chemistry--Organic, TT, v. 6, no. 7)

Office of Technical Services

Aleksandrakii, E. V. and Kuznetsova-Kharina, O. M.
INVESTIGATION OF SORPTION OF ACETYLENE.
[1961] 10p. 19 refs.
Order from OTS or SLA \$1.10

61-16916

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 296-305

DESCRIPTORS: *Acetylenes, Cellulose, Esters, Cata-
lysts, Stenates, Adsorbents.

The dynamic activity of various sorbents and certain
catalysts with respect to acetylene have been estimated,
and on the basis of the data obtained the unsuitability of
the following substances established for gas mask pro-
tection against acetylene: various commercial carbons,
gels, impregnated charcoals and hopcalite. The retain-
ing capacity of various impregnated carbons with
respect to acetylene is insignificant. The sorption
isotherms have been investigated for acetylene on
ethyl n-heptadecyl ketone, cellulose and some esters.
(Chemistry--Organic, IT, v. 6, no. 7) (over)

61-16916

I. Aleksandrakii, E. V.
II. Kuznetsova-Kharina, O. M.

15175

Office of Technical Services

Alekseevskii, E. V. and Likharev, N. A.
EFFECT OF SOME CHEMICAL AND PHYSICAL
FACTORS ON THE ACTIVITY OF CARBON. VIII.
CHLORINE ACTIVATION. [1961] 14p. 15 refs.
Order from ODS or SLA \$1.60 61-16893

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 306-320

DESCRIPTORS: *Activated carbon, Synthesis,
*Chlorine, Adsorption, Vapors.

Preparation of active carbons from various raw materials by carbonization at 750° and 950° was investigated. Sorption of vaporized and dissolved substances by chlorine-activated carbons was studied. Marked sorption activity of chlorine-activated carbons was established with respect to vapors, as well as dissolved substances, which exceeds in some cases the activity of steam-activated commercial carbons. The considerable amount of chlorine accumulated in chlorine-activated
(Chemistry--Physical. TT, v. 6, no. 7) (over)

61-16893

I. Alekseevskii, E. V.
II. Likharev, N. A.
III. Title: Chlorine...

15177

Office of Technical Services

The Alkaloid Delphinine From Delphinium Sp. I. Alkaloids of the Species of Delphinium, by M. S. Rabinovich, and R.A. Konovalova.

Full translation.

RUSSIAN, no per, Zhur Obshech Khim, USSR, Vol XII, 1942, pp 321-328.

ARC Tr 1457

Scientific - Chemistry, alkaloid Delphinine

Doc 52 CTS/DEX

I. The Alkaloid Condelphine From Delphinium Consusum
M. Pop; II. Alkaloids of Species of Delphinium
fam. Ranunculaceae, by M. S. Rabinovich, E. A.
Konovulova.
R.

Full translation.

RUSSIAN, no. per, Zhur Obsheh Khim, Vol XII, USSR,
1942, pp 329-336.

AEC Tr 1631

Scientific - Chemistry

Aug 53 CRS

4823

Organometallic Compounds in the Friedel-Crafts
Reaction, by A. P. Skoldinov, K. A. Kocheskov, 5 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XII, No 7-8,
1942, pp 398-402.

Assoc Tech Serv RJ628

Sci
Apr 59

84,465

Method for the Synthesis of Organo-Metallic
Lead Compounds With a Substituted Group
in the Benzene Nucleus, by M. M. Nad',
K. A. Kochesnikov.
RUSSIAN, per, Zhur Obshchei Khim, Vol XII,
1942, pp 409-414.
K-H-6108

Jan 67

317,903

Levina, R. Ya.
MECHANISM OF IRREVERSIBLE CONTACT CONVERSION OF CYCLOHEXANE AND CYCLOHEXENE HYDROCARBONS WITH UNSATURATED SIDE CHAINS. II. IRREVERSIBLE CATALYSIS OF A CYCLOHEXANE WITH AN OLEFINIC SIDE CHAIN, THE DOUBLE BOND OF WHICH IS SEPARATED FROM THE RING BY A QUATERNARY CARBON ATOM. [1961] 10p.

47 refs.

Order from OTS on SLA \$1.10

61-16664

Trans. of Chernol Obshchek Khimii (USSR) 1942, v. 12, p. 422-431.

DESCRIPTION: Hydrocarbons, Catalysis, Chemical bonds, Molecular structure.

The correctness of the previously proposed mechanism of irreversible contact conversion of cyclohexane and cyclohexenes with unsaturated side chains was verified (Chemistry-Original, TT, v. 6, no. 7) (over)

61-16664

1. Title: Contact conversion

I. Levina, R. Ya.

II. Title: Irreversible...

INT 11

Office of Technical Services

Nad, M. M. and Kocheskov, K. A.
METHOD FOR THE SYNTHESIS OF ORGANO-ME-
TALLIC LEAD COMPOUNDS WITH A SUBSTITUTED
GROUP IN THE BENZENE NUCLEUS. [1963] 9p
Order from K-H \$9.00 K-H 6108

Trans. of [Zhurnal Obshchei Khimii] (USSR) 1942,
v. 12 [no. 7/8] p. 409-414.
Abstract trans. is available from OTS or SLA \$1.10
to 61-20327 [1961] 6p.

DESCRIPTORS: *Metalorganic compounds, *Lead
compound, *Benzenes, Substitution reactions, Syn-
thesis (Chemistry), Nuclei.

(Chemistry--Organic, TT, v. 10, no. 12)

63-22815

- I. Nad, M. M.
- II. Kocheskov, K. A.
- III. K-H-6108
- IV. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

Office of Technical Services

Hydration of Pyrophosphoric Acid, by V. K.
Gerasimov, 1 pp.

RUSSIAN, per. Zhur Gerasimov, Vol III, 1981.
pp 468-473.

SLA R-2646

Sci

Aug 58

72,969

Structure of Phenolaldehyde Resins. XI. The Nature
of Resinous Condensation Products of Phenol With
Formaldehyde, by A. A. Vansheidt, A. T. Itenberg,
V. S. Shifrina, 7 pp. UNCLASSIFIED.

RUSSIAN, per, Zhur Obshch Khim, Vol XII, 1942,
pp 500-509.

CIA/FDD/X-1472

Scientific - Chemistry

13,651

Comparative Hydrogenation of Octadecanoic
Acids, by Pigulevskii, P. A. Artemonov,
11p.
RUSSIAN, per, Zhurnal Obshchei Khimii,
Vol 12, No 9/10, 1942, pp 510-517.
OTS TT-65-60100

Sci
Aug 67

333, 847

Danilov, S. N.
DEVELOPMENT OF ORGANIC CHEMISTRY IN USSR
SINCE THE OCTOBER REVOLUTION. [1961] 23p.
208 refs.

Order from OTS or SLA \$1.10

61-16649

Condensed trans. of Zhurnal Obshchei Khimii (USSR)
1942, v. 12, p. 533-567.

DESCRIPTORS: Chemical industry, USSR, *Organic
compounds, Hydrocarbons, Metalorganic compounds,
*Chemistry.

(Chemistry--Organic, TT, v. 6, no. 6)

61-16649

I. Danilov, S. N.

176563

Office of Technical Services

Nikolaeva, A. P. and Prost, A. V.
MECHANISM OF CONVERSION OF CYCLOHEXANE
TO HEXANES DURING HYDROGENATION OVER
MOLYBDENUM SULFIDE. [1961] 3p. 4 refs.
Order from OTS or SLA \$1.10

61-16650

Trans. of Zhurnal Obshchei Khimii (USSR) 1942, v. 12,
p. 643-648.

DESCRIPTORS: *Cyclohexanes, *Hydrogenation,
Molybdenum compounds, Sulfides, Hexanes, Chemical
reactions.

Hydrogenation in the presence of molybdenum sulfide
converts cyclohexane into hexanes through the inter-
mediate stage of formation of methylcyclopentane.
(Author)

(Chemistry--Organic. TT, v. 6, no. 7)

61-16650

I. Nikolaeva, A. P.
II. Prost, A. V.

151774

Office of Technical Services

V
A Contribution to the Problem of Vinyl Ethers, I.
Synthesis and Properties of Vinyl Ethers, by A. E.
Favorskiy, M. F. Shostakovskiy, 42 pp.

RUSSIAN, per, Zhur Obshchei Khim, Vol XIII, No 1/2,
1943, pp 1-20.

Sci Tr Center
RT - 3760

Sci - Chemistry

Aug 1956

37,74

SLA 61-8

Plate, A. F. and Tarasova, G. A.
MECHANISM OF CONTACT CONVERSIONS OF HY-
DROCARBONS ON A VANADIUM CATALYST.
I. CONTACT CONVERSIONS OF NORMAL HEPT-
ANE (Nobranizn Kontaktnykh Prevrashchenii
[Udevo] na Vanadievom Katalizatore). [1961]
15, 20 Feb.

Order from OTS - SLA \$1.60

61-16982

Trans. of Zhurnal Obshchei Khimii (USSR) 1943, v. 13,
[no. 1/2] p. 21-37.

DESCRIPTORS: Hydrocarbons, Heptanes, Dehydro-
genation, Vanadium catalysts, Monocyclic compounds.

Dehydrogenation of normal heptane on the vanadium
trioxide-alumina catalyst was investigated within the
temperature interval of from 440 to 510°. The veloc-
ity of the total reaction of dehydrogenation was indi-
cated by the amount of gas (hydrogen) liberated per 3
minutes, and it was established that the change of the
(Chemistry - Organic, TT, v. 6, no. 7) (over)

61-16982

- I. Title: Contact conversion
- I. Plate, A. F.
- II. Tarasova, G. A.
- III. Title: Contact...

Office of Technical Services

Plate, A. F. and Tarasova, G. A.
MECHANISM OF CONTACT CONVERSIONS OF HY-
DROCARBONS ON A VANADIUM CATALYST.
II. KINETICS OF CYCLIZATION OF NORMAL
HEPTANE [Mekhlizm Kontaktnykh Prevrashchenii
Uglevodorodov na Vanadievom Katalizatore]. [1961]
7p. 17 ref.

Order from OTS or SLA \$1.10

61-16981

Trans. *Khimicheskoi Khimii* (USSR) 1943, v. 13
[no. 1/2], p. 36-42.

DESCRIPTORS: Hydrocarbons, Heptanes, Cyclo-
hexane, Dehydrogenation, Vanadium catalysts, Mono-
cyclic compounds.

It was established that the total reaction of dehydro-
genation of normal heptane on vanadium catalyst fol-
lows the Arrhenius equation and that the apparent en-
ergy of activation of this reaction is 41,100 cal per
(Chemistry-Organic, TT, v. 6, no. 7) (over)

61-16981

- I. Title: Mechanism of contact conversions
- I. Plate, A. F.
- II. Tarasova, G. A.
- III. Title: Kinetics...

161766

Office of Technical Services

The Action of Aluminum Chloride on N-nitramino-
pyridine in the Presence of Benzene, by D. N. Kur-
sanov, E. A. Ignat'eva, 14pp.

Zhur Obshch Khim

RUSSIAN, mo per, Vol XIII, No 1-2, 1943, pp 62-67.

Sci Tr Ctr RT-3813

Sci - Chemistry
Aug 56 Cta/ax

37,541

Conjugated Systems. XVIII. Interaction of Chloro-
acene with Chlorine, by A. A. Petrov, 12 pp.

Zhurn Obshch Khim

Russian, in per, Vol XIII, No 1-2, 1943, pp108-107.

Sci Tr Cir EE-3817

Sci - Chemistry
Aug 56 CTS/lex

37,542

Conjugated Systems. XIX. Bromination of
Chloroprene, by A. A. Petrov, 11 pp.

RUSSIAN, per, Zhur Obshchey Khim, Vol XXIII, No 1/2,
1943, pp 108-112.

Sci Tr Center
RT - 3860

Sci - Chemistry

Aug 1956

37,160

The Effect of the Diameter of Laboratory Columns
with Ponske Packing on Their Efficiency and
Throughput, by B. A. Kazanskiy, et al. 12 pp
UNCLASSIFIED

RUSSIAN, Per, Zhur Obshch Khim, Vol XIII, No 3,
1943, pp 125-130,

Sci Tr Center
RT-1010

Scientific - Chemistry

15,361

JOURNAL OF GENERAL CHEMISTRY, 1943,
VOL. 13, NO. 3: [TABLE OF CONTENTS] AND
SELECTED ABSTRACTS. [1961] 13p. 10 refs.
Order from OTS or SLA \$1.60 61-20331

Abstract trans. of Zhurnal Obshchei Khimii (USSR)
1943, v. 13, no. 3, p. 131-158, 164-168, 175-188,
202-216, 230-241.

*Complete translations of p. 136-144, 184-188,
202-212 are available separately.

DESCRIPTORS: *Chemistry, Abstracting, Periodicals,
Alcohols, Silicic acids, Acids, Esters, Butadienes,
Synthesis, Urea derivatives, Ketones, Alkylation,
Chloroprenes, Iodine, Bromine, Chemical reactions,
Stilbenes, Hydrolysis, Vanadium, Catalysts, Ethyl
radicals, Cyclopentanes, Pentanes.

(Chemistry, TT, v. 7, no. 1)

(over)

61-20331

- I. Title: Arylation...
- II. Title: Interaction of
Chloroprene...
- III. Title: Alkylation...
- IV. Title: Hydrolysis...
- V. Title: Contact...
- VI. Title: Interaction of 1, 2...
- VII. Title: Order...

Office of Technical Services

Intramolecular Rearrangements in the Aromatic Series.
III. Arylation and Alkylation of Aryl-Derivatives
of Urea, by G. I. Gershon, 17 pp.

RUSSIAN, per, Zhur Obshchei Khim, Vol XIII, No 3,
1943, pp 136-144.

Sci Tr Center
RT - 3841

Sci - Chemistry

Aug 1956

37,175

The Nature of Stereogenic Double Bonds. The
Behavior of Quaternary/Quaternary Derivatives Under the
Action of Certain Reagents Capable of Addition to
Stereogenic Double Bonds, by D. N. Kuznetsov, A. S.
Kuznetsova, 5 pp.

RUSSIAN, no par, Zhur Obshch Khim, Vol XLII, No 3,
1968, pp 184-188.

Sci Tr Center
RU-3852

39,140

Sci - Chemistry
Sep 56 CAS/ick

Alkylation with Olefines in the Presence of
Aluminum Chloride. Communication I , by S. I. Lur'e
A. Ya. Golovacheva, 12 pp.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIII, No 3,
1943, 189-194.

Sci Tr Ctr RT-3853

SLA 61-11619

Sci - Chemistry
Aug 56 CTS/dex

37,543

Alkylation With Olefines in the Presence of
Aluminum Chloride, Communication II., 15 pp.
by S. I. Lur'e, A. Ya. Golovacheva

RUSSIAN, no per, Zhur Obshch Khim, Vol XIII,
No 3, 1943, pp 195-201.

Sci Tr Center
RT-3854

Sci - Chemistry

Aug 1956

37,882

SL 61-10511

The Mechanism of Contact Transformations of
Hydrocarbons on a Vanadium Catalyst. III.
The Contact Transformations of Ethyl-Cyclo-
Pentane, by A. F. Plute, O. D. Sterligov, 24 pp.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIII,
No 3, 1943, pp 202-212.

Sci Tr Center
RT-3858

Sci. - Chemistry

Aug 1956

37,883.

SLA 11 11 11

Zhur Oskolki Khim

Vol 13, pp 253-66 (1963)

New Complex Compounds of Rhenium

V.V. Echedinskii

B.N. Ivanov - Leningrad

AEC 22 299
Broadhurst

Solubility of Lithium Bromate and of its hydrates,
Communication II, by I. N. Averko-Antonovich,
7 pp.
RUSSIAN, per, Zhur Obshch Khim, Vol XIII, 1943,
pp 272-278, 9250303.
AEC INI-tr-5

292,9547

Sci-Chem
Nov 65

Polymerization of Isobutylene Over Hydrosilicic
Catalysts. Communication III., by B. A. Kazanskiy,
M. I. Rozengart, 9pp.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIII,
No 4-5, 1943, pp 304-308.

Sci Tr Ctr- RT-3808

Sci-Chemistry
Aug 56 CTS/dex

37,537

A New Method of Separating Lupinine From Crude
Anabasine Sulphate, by A. Sadykov, G.
Lazarevski

RUSEIAN, per, Zhur Obshch Khim, Vol XIII, 1943,
pp 319-321.

AEC Tr 1153

Scientific - Chemistry

Turova-Polyak, M. B. and Rappoport, P. L.
ISOMERIZATION OF POLYMETHYLENE HYDRO-
CARBONS UNDER THE ACTION OF ALUMINUM
CHLORIDE. X. ISOMERIZATION OF METHYL-
CYCLOHEPTANE. [1961] 5p. 11 refs.
Order from OTS or SLA \$1.10

61-16660

Trans. of Zhurnal Obshchei Khimii (USSR) 1943,
v. 13, p. 353-357.

DESCRIPTORS: *Hydrocarbons, *Cycloheptanes,
*Molecular isomerism, Aluminum compounds,
(Chlorides).

Interaction of methylcycloheptane with aluminum chlor-
ride, accompanied by liberation of heat, results in com-
plete conversion of methylcycloheptane into dimethyl-
cyclohexane. Under the conditions of catalytic dehydro-
genation methylcycloheptane undergoes an isomeri-

(Chem. Abstr. Organic, 17, v. 6, no. 7) (over)

61-16660

- I. Turova-Polyak, M. B.
- II. Rappoport, P. L.
- III. Title: Isomerization of
Methylcycloheptane

1961

Office of Technical Services

Polarographic Determination of Copper, Nickel,
Cobalt, Zinc and Cadmium When Simultaneously
Present, by D. P. Malyuga.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIII,
No 6, 1943, pp 391-397.

Assoc Tech Sv RJ-259
\$12.00

Scientific - Chemistry;
CIS 73/Oct 1955

m/m. 27,695

Shostakovskii, M. F. and Sidel'kovskaya, F. P.
STUDIES IN THE FIELD OF THE POLYMERIZATION
OF SIMPLE VINYL ETHERS: VINYL-ISOBUTYL
ETHER (Issledovaniya v Oblasti Polimerizatsii
Prostykh Vinilovykh Eftirov: Vinil-Izobutil'nyi Eftir).
[1963] [20p] (foreign text included) 7 refs
Order from OTS or SLA \$1.60

63-20181

Trans. of Zhurnal Obshchei Khimii (USSR) 1943,
v. 13, no. 6, p. 428-435.
Abstract trans. is available from OTS or SLA \$1.10
as 62-16830 [1962] 4p.

DESCRIPTORS: *Vinyl radicals, *Butyl radicals,
*Propyl radicals, *Ethers, Polymerization, *Catalysts,
*Tin compounds, Chlorides, Density, Refractive
index, Viscosity, Saponification, *Polyvinyl alcohol.

(Chemistry--Organic, TT, v. 10, no. 12)

63-20181

- I. Title: Vinyl isobutyl ether
- I. Shostakovskii, M. F.
- II. Sidel'kovskaya, F. P.
- III. Title: Vinyl-Isobutyl...

Office of Technical Services

Investigation in the Ketone Series. II.
Condensation of Monoketones with Cyanoacetic
Acid, by D. M. Trakhtenberg, M. M. Shenyakin,
7 pp.

RUSSIAN, no per, ~~Zhurn. Obshch. Khim.~~ Vol XIII, No
6, 1943, pp 477-480.

Sci Tr Center

RT-3838

0

37,885

Sci - Chemistry

Aug 1956

Maslyanskii, G. N.
KINETICS OF ISOMERIZATION OF CYCLOHEXANE
UNDER ELEVATED PRESSURES. [1961] 11p. 28 refs.
Order from OTS or SLA \$1.10 61-16913

Trans. of Zhurnal Obshchei Khimii (USSR) 1943, v. 13,
p. 540-551.

DESCRIPTORS: *Cyclohexanes. Reaction kinetics.
Catalysis.

The catalytic isomerization of cyclohexane over molybdenum sulfide in the presence of hydrogen pressure was investigated and the kinetic regularities of this reaction established. The isomerization velocity depends upon the partial pressure of cyclohexane, but is independent of the partial pressure of hydrogen. The order of reaction of isomerization of cyclohexane over molybdenum sulfide is close to 0.6. The apparent energy of activation of cyclohexane at 370-430° is $35,400 \pm 1,000$ calories. Accordingly the temperature coefficient on (Chemistry-Physical, TT, v. 6, no. 7) (over

61-16913

I. Maslyanskii, G. N.

1961/50

Office of Technical Services

Pokrovskaya, E. S.
SYNTHESIS OF POLYCYCLIC HYDROCARBONS. I.
HYDROCARBONS OF THE SERIES OF α -METHYL-
CYCLOPENTYLNAPHTHALENE. [1961] 4p. 9 refs.
Order from OTS of CIA \$1.10 61-16897

Condensed trans. of Zhurnal Obshchei Khimii (USSR)
1943, v. 13, p. 519-523.

DESCRIPTORS: *Hydrocarbons, *Polycyclic compounds,
*Naphthalenes, Synthesis.

By condensation of α -methylnaphthalene with cyclo-
pentene in the presence of aluminum chloride, α -methyl-
cyclopentyl-naphthalene, α -methyl-dicyclopentyl-naphtha-
lene and α -methyl-tricyclopentyl-naphthalene were ob-
tained. The first two of these hydrocarbons were again
condensed with cyclopentene under the same conditions
and α -methyl-tetracyclopentyl-naphthalene was obtained.
The specific gravities of these hydrocarbons are some-
(Chemistry-Organic, TT, v. 6, no. 7) (over)

61-16897

I. Pokrovskaya, E. S.
II. Title: Hydrocarbons ...

1943

Office of Technical Services

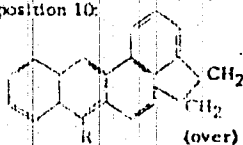
Mikhailov, B. M. and Blokhina, A. N.
 SYNTHESIS OF POLYCYCLIC COMPOUNDS. VIII.
 10-ALKYL DERIVATIVES OF 3,4'-ace-1,2-BENZ-
 ANTHRACENE. 1969, 13 pp. 13 refs.
 Order from GTS or SLA \$1.10

61-16896

Condensed transl. of Zhurnal Obshchei Khimii (USSR)
 1949, v. 19, p. 602-615.

DESCRIPTORS: *Polycyclic compounds, Benzenes,
 *Anthracenes, Synthesis, Alkyl radicals.

Synthesis of four 3,4'-ace-1,2-benzanthracenes is re-
 ported, containing a methyl, ethyl, normal propyl or
 normal butyl radical in position 10:



61-16896

I. Mikhailov, B. M.
 II. Blokhina, A. N.
 III. Title: 10-Alkyl ...

10-ALKYL ...

Office of Technical Services
 (Chemistry-Organic)
 TT, A-6, 10, 7)

61-16899

Getling, V. A. and Shchekin, V. V.
PREPARATION OF SOME HIGH MOLECULAR HY-
DROCARBONS. [1961] 4p. 16 refs.
Order from OTS or SLA \$1.10

61-16899

I. Getling, V. A.
II. Shchekin, V. V.

Condensed trans. of Zhurnal Obshchei Khimii (USSR)
1943, v. 13, p. 717-721.

DESCRIPTORS: *Hydrocarbons, Synthesis, Catalysts,
Hydrogenation, Molecular weight, Alcohols, Benzenes,
Cyclohexanes.

Synthesis of normal octadecane in mixture with normal
octadecyl alcohol is reported by hydrogenation of sun-
flower oil fatty acids over a copper-chromium cata-
lyst. From normal octadecyl alcohol and benzene,
normal octadecylbenzene was obtained, and this was
hydrogenated quantitatively to normal octadecylcyclo-
hexane. (Author)

(Chemistry--Organic, TT, v. 6, no. 8)

155120

Office of Technical Services

Nikolaeva, A. P. and Frost, A. V.
CATALYTIC ACTION OF ACTIVE ALUMINO-SILI-
CATES. III. CONVERSION OF HEXENE OVER ACTI-
VATED CLAY. [1966] 3p. 3 refs.
Order from OTS or SLA \$1.10

61-16898

Trans. of Zhurnal Obshchei Khimii (USSR) 1943, v. 13,
p. 733-735.

DESCRIPTORS: *Cyclohexenes, Catalysis, Clays.
Aluminum compounds, *Silicates, Catalysts.

(Chemistry--Organic, TT, v. 6, no. 7)

61-16898

I. Nikolaeva, A. P.
II. Frost, A. V.
III. Title: Conversion...

Office of Technical Services

Ya. A. Fialkov

Electric conductivity of iodine solutions. 3: Electric conductivity of the system: I-Me4NI

ZH. OBSHCH. KHIM. Vol 13, 1943, pp 753-761

NASA TT F 13,911

mar 73

The Separation of Anabasine and Luinine from an
Alkaloid Mixture Using a Liquid Ammonia Mixture, y
by A. Sadykov, m and N. Spasokutotskii.

Full translation.

RUSSIAN, per Zhur Obshch Khim, Vol XIII, USSR, 1943,
pp 830-833.

Scientific - Chemistry

AEC Tr 1264

Differential Thermocouple Method in Heterogeneous
Catalysis, by A. A. Balandin, V. V. Patrikeyev,
10 pp.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIV, No 1/3
1944, pp 57-69.

Sci Tr Center
RT -2656

Scientific -- Chemistry
Dec 55 CTS/DEX

28,988

Electrochemical Thiocyanation of Organic Compounds.
Com. III. Thiocyanation of p-substituted Aromatic AME
Amines, by N. H. Mal'nikov, E. M. Cherkasova,
6 pp UNCLASSIFIED

RUSSIAN, Per, Zhur Obshchei Khim, Vol XIV, No 1-2,
1944, pp 113-115,

Sci Tr Center
RT-1009

Scientific - Chemistry

15,356

Nazarova, Z. N. and Tsukervanik, I. P.
ALKYLATION OF AROMATIC COMPOUNDS WITH
ALCOHOLS IN THE PRESENCE OF ANHYDROUS
FERRIC CHLORIDE. [1961] sp. 4 refs.
Order from OTS or SLA \$1.10

61-16906

Tran. of Zhurnal Obshchei Khimii (USSR) 1944,
v. 14 [no. 10] p. 777-80.

DESCRIPTORS: *Alcohols, *Iron compounds, *Chlor-
ides, *Catalysis, Condensation reactions, Alkyl
radicals, *Reaction kinetics, Phenols, Benzenes

Attempts to condense normal primary aliphatic alco-
hols with benzene and phenol in the presence of an-
hydrous ferric chloride were unsuccessful. Experi-
ments of condensation of benzyl alcohol with benzene
and phenol gave diphenylmethane and benzylphenol.
(Chemistry--Physical, BT, v. 7, no. 3) (over)

61-16906

I. Nazarova, Z. N.
II. Tsukervanik, I. P.

Office of Technical Services

Synthesis of Chlorostyrenes, by S. N. Ushakov,
P. A. Matasov, 13 pp.

RUSSIAN, no per, Zhur Obshch Khim, Vol XIV,
No 1/2, 1944, pp 120-127.

Sci Tr Center
RT-3633

Sci - Chemistry

Aug 1956

37,888

Maslyanski, G. N.
DESTRUCTIVE HYDROGENATION OF BENZENE.
[1961] 1 p., 28 refs.
Order from OTS or SLA \$1.10

61-18193

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 143-144.

DESCRIPTORS: Benzene, Hydrogenation, Hydro-
carbon, Catalyst, Molybdenum compounds, Oxide.

Molybdenum oxide catalysts suitable for destructive hy-
drogenation in the vapor phase, developed at the
author's laboratory, were previously found to be very
efficient in cracking of hydrocarbons. In order to in-
vestigate the nature of the chemical reactions occurring
on these catalysts, conversion of benzene was studied
in this work and the products obtained investigated, con-
sidering also the results reported by some other
authors. Among these products, methylcyclopentane
(53%), normal pentane (1.5%), 2-methylbutane (1.5%).
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18193

I. Maslyanski, G. N.

1797
Office of Technical Services

Nazarova, Z. N. and Tsukervanik, L. P.
MECHANISM OF REACTIONS OF ALKYLATION UN-
DER THE INFLUENCE OF ANHYDROUS FERRIC
CHLORIDE. [1961] 10p. 15 refs.
Order from OTS or SLA \$1.10

61-18168

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 236-244.

DESCRIPTORS: *Iron compounds, *Chlorides, *Catal-
ysis, *Alcohols, Condensation reactions, Ethyl radi-
cals, Reaction kinetics, Bromides, Alkyl radicals.

It was established that no condensation of ethyl bro-
mide, normal butyl chloride and isoamyl chloride with
aromatic hydrocarbons occurs in the presence of fer-
ric chloride. In this respect the difference between
aluminum chloride and ferric chloride is especially
pronounced. A study of interaction of alcohols with
(Chemistry--Physical, TT, v. 6, no. 9) (over)

61-18168

I. Nazarova, Z. N.
II. Tsukervanik, L. P.

105425

Office of Technical Services

Turova-Polyak, M. B. and Novitskii, K. Yu.
ISOMERIZATION OF POLYETHYLENE HYDRO-
CARBONS [UNDER THE ACTION] OF ALUMINUM
CHLORIDE. XL ISOMERIZATION OF CYCLO-
OCTANE. [1961] 6p. 9 refs.
Order from OTS or SLA \$1.10

61-18163

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 337-342.

DESCRIPTION: "Hydrocarbons, Molecular isomerism,
Cyclooctanes, Cyclohexanes, Aluminum compounds,
Chlorides."

Isomerization of cyclooctane in the presence of alumi-
num chloride was investigated. Interaction of cyclo-
octane with aluminum chloride, attended by liberation
of heat, was found to bring about complete conversion
of cyclooctane into dimethylcyclohexane. Thus, isom-
erization of an eight-membered naphthenic ring into a
six-membered ring was established. (Author) (See
also 61-16660)

61-18163

- I. Turova-Polyak, M. B.
- II. Novitskii, K. Yu.
- III. Title: Isomerization of
Cyclooctane

Office of Technical Services

(Chemistry--Organic, TT,
v. 6, no. 7)

Moldavskii, B., Nebylova, E., and Nizovkina, T.
 ISOMERIZATION OF HYDROCARBONS. VI. INVESTIGATION OF BY-PRODUCTS FORMED IN ISOMERIZATION OF BUTANES AND PENTANES BY ALUMINUM HALIDES AND THE MECHANISM OF THEIR FORMATION. [1944] 6p. 11 refs.
 Order from GTS or SLA \$4.10

61-18162

Trans. of Zhurnal Khimii (USSR) 1944, v. 14, p. 343-349

DESCRIPTORS: *Hydrocarbons, *Molecular isomerism, *Butanes, *Pentanes, Aluminum compounds, Chlorides.

Isomerization of butanes and pentanes by aluminum chloride forms hydrocarbon by-products which boil below and above the boiling point of the initial hydrocarbons. The mechanism of formation of these hydrocarbons involves demethylation and methylation of butanes and pentanes by aluminum chloride. In the case (Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18162

- I. Moldavskii, B.
- II. Nebylova, E.
- III. Nizovkina, T.
- IV. Title: Investigation ...

10162

Office of Technical Services

Moldavskii, B. and Zharkova, V.
ISOMERIZATION OF HYDROCARBONS. VII. ANALY-
SIS OF MIXTURES OF ISOMERIC PENTENES. [1961]
Sp. 7 refs.
Order from OTS or SLA \$1.10

61-18161

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 359-364.

DESCRIPTORS: *Hydrocarbons, *Molecular isomerism,
*Pentenes, Determination.

A method of analysis of mixtures of isomeric pentenes
was developed, consisting in distilling off 3-methyl-1-
butene and determining in the residue the total amount
of unsaturated and that of unsaturated with a double
bond at a tertiary carbon atom. This method is suitable
also to the determination of other olefins, for instance
those containing 4, 6 or 7 carbon atoms and possessing
a double bond at a tertiary carbon atom. The analytical
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18161

I. Moldavskii, B.
II. Zharkova, V.
III. Title: Analysis ...

15178

Office of Technical Services

Thermal Analysis of the System $\text{NaF}-\text{BeF}_2$. X-Ray
Analysis of This System, by A. V. Novoselova, M. E.
Levin, 30 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XIV, No 6,
1944, pp 385-402.

28,910

Sci Tr Center
RT-2187

Scientific - Chemistry

Nov 55 CTS/DEX

Gas-Permeability and Microstructure of
Highpolymeric Compounds, by S. A. Reitlinger,
6 p.

RUSSIAN, per, Partial Trans, (p 420-423) of
Zhurnal Obshchey Khimii, 1944, Vol XIV, No 6
pp 420-427.

SLA 62-10848
SLA 59-15848

Sci
Jan 60
Vol 2, No 5

Zavgorodni, S. V.
BORON FLUORIDE AS A CATALYST IN ORGANIC
CHEMISTRY. III. VELOCITY OF CONDENSATION
OF CYCLOHEXENE WITH CARBOXYLIC ACIDS IN
THE PRESENCE OF BORON FLUORIDE IN SOL-
VENTS. [196] 3p. 11 refs.
Order from OIS or SLA \$1.10

62-10849

[Condensed trans. of Zhurnal Obshchei Khimii (USSR)
1944, v. 14, no. 6, p. 428-434.

DESCRIPTORS: *Boron compounds, *Fluorides,
Catalysts, *Cyclohexenes, *Carboxylic acids, Con-
densation, Velocity, Organic solvents.

(Chemistry--Organic, IT, v. 7, no. 11)

62-10849

I. Zavgorodni, S. V.
II. Title: Velocity...

Office of Technical Services

Korshak, V. V. and Kolesnikov, G. S.
MECHANISM OF THE FRIEDEL-CRAFTS RE-
ACTION, I. [1961] 8p, 8 refs.
Order from OTS or SEA \$1.10

62-10850

[Condensed] trans. of Zhurnal Obshchei Khimii (USSR)
1944, v. 14, no. 6, p. 435-437.

DESCRIPTORS: *Friedel-Crafts reactions, Chemical
reactions, Benzenes, Ketones.

(Chemistry--Organic, TT, v. 7, no. 11)

62-10850

I. Korshak, V. V.
II. Kolesnikov, G. S.

Office of Technical Services

Petrov, A. D. and Kurbakii, G. P.
SYNTHESIS AND PROPERTIES OF MONOALKYL
NAPHTHALENES (C₁₇-C₂₁) AND SOME HYDROGE-
NATED DERIVATIVES OF THEM. [1961] 3p. 8 refs.
Order from OTS or SLA \$1.10 61-18204

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 492-494.

DESCRIPTORS: *Naphthalenes, Synthesis, Antiknock,
Alkyl radicals, Hydrocarbons.

Synthesis of four alkylated naphthalenes with from 17
to 21 carbon atoms is reported; two of these were
hydrogenated to the corresponding decalin derivatives.
Pour points and antiknock properties of these hydro-
carbons expressed in cetene numbers were determined.
(Author)

(Chemistry--Organic. TT. v. 6, no. 7)

61-18204

I. Petrov, A. D.
II. Kurbakii, G. P.

Office of Technical Services

Petrov, A. D. and Lapcheva, E. I.
SYNTHESIS AND PROPERTIES OF SOME HIGHER
HOMOLOGS OF BENZENE, III. [1961] 3p. 12 refs.
Order from OTS or SILA \$1.10 61-18203

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14,
p. 495-497.

DESCRIPTORS: *Benzenes, Synthesis, Chemical
properties.

Properties of newly synthesized propyloctylphenyl-
methane and dibutyloctylphenylmethane were studied
and blending curve numbers of methylnonylphenyl-
methane were determined. (Author)

(Chemistry--Organic. TT, v. 6, no. 7)

61-18203

I. Petrov, A. D.
II. Lapcheva, E. I.

1961

Office of Technical Services

Petrov, A. D., Shchupina, Z. K., and Ol'dekop, Yu. A.

SYNTHESIS OF 9,10-DIMETHYLOCTADECANE AND 9,10-DIPROPYLOCTADECANE [1961] 3p. 13 refs.
Order from OTS or SLA \$1.10 61-18202

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14, p. 498-500.

DESCRIPTORS: Synthesis, *Propanes, Hydrocarbons, *Fuel oil, Methyl radicals, Alkyl radicals, Propyl radicals, *Mechanics, Viscosity, Antiknock.

Synthesis of two isoparaffins with 20 and 24 carbon atoms, respectively, was effected, namely, 9,10-dimethyloctadecane and 9,10-dipropyloctadecane. These hydrocarbons are characterized by low pour points, satisfactory antiknock properties and a flat temperature-viscosity curve. (Author)

(Chemistry--Organic TT, v. 6, no. 8)

61-18202

I. Petrov, A. D.
II. Shchupina, Z. K.
III. Ol'dekop, Yu. A.

155126

Office of Technical Services

The Study of the Reaction of Sulfonation XI. The
Influence of Time and Excess of Sulfonated
Substance Upon the Process of the Reaction, by
A. A. Spryashin, 15 p.

RUSSIAN, per. Zhur Chish Khim, 1954, Vol XIV,
No 7/8, pp 833-841.

SIA 59-17827

Sci
Feb 60
Vol 2, No 10

108,837

Kuznetsov, V. I.
 REACTION COLOREE SUR LE THORIUM.
 I. REACTIFS ORGANIQUES POUR LE THORIUM
 (Color Reaction of Thorium. I. Organic Reagent for
 Thorium) tr. by M. Kefeli, Y. 9 May 60 [13]p. 9 refs.
 CEA Trans. no. R 897 (text in French).
 Order from CTR or SLA \$1.60 61-23813

Trans. in French of Zhurnal Obshch[est] Khim[ist]
 (USSR) 1944, v. 14, no. 9/10, p. 914-919.
 A translation in English available from SLA as
 RT-2824.

DESCRIPTORS: *Thorium, *Reagents, Colors,
 Chemical reactions, USSR.

for Thorium 10/52/3241

(also see 10/52/3241)

20 pages 50

(Chemistry--Organic, TT, v. 6, no. 6)

61-23813

- I. Kuznetsov, V. I.
- II. Title: Reactifs...
- III. Title: Organic...
- IV. CEA-tr-R897
- V. Commissariat à l'Énergie Atomique (France)

176694

Office of Technical Services

Plate, A. F., Sterligov, O. D., and Bazhulin, P. A.
HYDROCARBONS OF THE SERIES OF CYCLOPENTANE WITH A DOUBLE BOND IN THE SIDE CHAIN: 4-CYCLOPENTYL-1-BUTENE AND 3-CYCLOPENTYL-1-BUTENE [1961] (p. 16 refs.
Order from OTS or SLA \$1.10

61-18214

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14, p. 955-959.

DESCRIPTORS: *Hydrocarbons, *Cyclopentanes, *Butenes, Synthesis, Raman spectroscopy.

Interaction of cyclopentylmagnesium chloride with the product of addition of 1 molecule of hydrogen bromide to butadiene forms a mixture of unsaturated hydrocarbons from which 3-cyclopentyl-1-butene was isolated in pure state and 4-cyclopentyl-2-butene as a mixture of its cis and trans isomers. The structure of these olefins was proved by a study of their Raman spectra.

(Author)
(Chemistry--Organic, TT, v. 6, no. 7)

61-18214

I. Plate, A. F.
II. Sterligov, O. D.
III. Bazhulin, P. A.

Office of Technical Services

The Chemistry of Phosphorous, by Y. I. Mikhailenko.
V. I. Semishin, 6 pp.

RUSSIAN, per, Zhur Obshchei Khim, Vol XIV, 1944,
pp 1025-1029.

SLA R-3028

Sci

Jul 59

92, 354

Action of Haloid-Substituted Ethers on Triethyl
Phosphite and Salts of Diethyl-Phosphorous Acid,
by Abramov, Sergeyeva, Zh. Chelpanova 12 pp 14 pp.

Full translation.

RUSSIAN, per, Zhur Obshch Khim, Vol. XIV, No 11-12,
1944, pp 1030-1037.

SIA RT-2278 (6 pp)

Def Sci Info Sv, DRB Canada,
T.92.R

Scientific - Chemistry CTS 63-20255 (12 pp)
Jul 53 CTS/DEX

CIA 1602595

4/1/77

Ushakov, M. I. and Kosheleva, N. F.
PHOTOPOLYMERIZATION OF $\Delta^4,6$ -CHOLESTADIENONE. by Z. D. Knowles, 23 Oct 51, 10p.
4 refs.

Order from OTS or SLA \$1.10

61-28119

Trans. of Zhurnal Obshchei Khimii (USSR) 1944, v. 14, no. 11/12, p. 1138-1141.

DESCRIPTORS: *Cholestenone, Polymerization, Ultraviolet radiation, Hydrogenation, Hexanes, Cholesterol, Photo-chemistry, Chemistry.

At exposure to ultraviolet light of a solution of $\Delta^4,6$ -cholestadienone in hexane, a dimer-lumicholestenone is obtained which at heating dissociates, yielding inversely $\Delta^4,6$ -cholestadienone. At catalytic hydrogenation with platinum black lumicholestenone ($C_{54}H_{84}O$) at the splitting off of water converts into (Chemistry--Organic, TT, v. 7, no. 5) (over)

61-28119

- I. Ushakov, M. I.
- II. Kosheleva, N. F.
- III. National Institutes of Health, Bethesda, Md.

Office of Technical Services

Vvedenskiĭ, A. A. and Fel'dman, L. F.
THERMODYNAMICS OF SYNTHESIS OF ETHYL
ALCOHOL FROM ETHYLENE AND WATER. [1961] 5p.
19 refs.

Order from OTS or SLA \$1.10

61-18249

Trans. of Zhurnal Obshchei Khimii (USSR) 1945, v. 15
[no. 1/2] p. 57-61.

DESCRIPTORS: *Ethanol, Synthesis, Thermodynamics,
Ethylenes, Water, Chemical reactions, Chemical equi-
librium.

The concentration of ethyl alcohol in the equilibrium
gaseous mixture was calculated at temperatures of
from 150 to 400° and pressures from 50 to 200 atm.
(Author)

(Chemistry--Organic, TT, v. 6, no. 10)

61-18249

I. Vvedenskiĭ, A. A.
II. Fel'dman, L. F.

240

Office of Technical Services

The Study of the Amination of Organic Halogen
Compounds in Liquid Ammonia, 2. The Reaction
Between Liquid Ammonia and Lower Alkyl Halides,
by N. S. Spasokukotskiy, Ch. S. Markova,
A. I. Shatenshtein, 29 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XV,
No 1/2, 1945, pp 42-59.

Sci Ma Lib No 54/2913

Scientific - Chemistry

Natl Arch 113 TT 443

19,697 Nov 1954 CTS

Carbocation Rearrangement of the Second Type, by
S. I. A. Sivkov, 8 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XV, No 1-2,
1945, pp 70-74.

Sci Tr Center
RT-1418

Scientific - Chemistry

18,880

Part III ..
Determination of Active Hydrogen With Grignard's
Reagent in an Atmosphere of Carbon Dioxide, by
A. P. Terent'ev, K. D. Shcherbakova.

Full translation.

RUSSIAN, per, Zhur Obshch Khim, Vol XV, 1945,
pp 86-89.

AEC Tr 1574

Scientific - Chemistry

May 53 CES

2101
2101

61-18251

Plate, A. F. and Tarasov, G. A.
MECHANISM OF CONTACT CONVERSIONS OF HY-
DROCARBONS ON A VANADIUM CATALYST. IV.
DEHYDROGENATION OF SIX-MEMBERED RINGS.
[1961] 9p. 12 refs.
Order from OTS or SLA \$1.10

61-18251

Trans. of Zhurnal Obshchei Khimii (USSR) 1945, v. 15,
p. 120-130.

DESCRIPTORS: *Hydrocarbons, *Cyclohexanes,
Methyl radicals, Dehydrogenation, *Vanadium, Cata-
lysts, Catalysis.

Dehydrogenation of cyclohexane and of methylcyclohex-
ane was investigated on a vanadium catalyst within the
temperature interval of 440 to 500°. The principal re-
action consists in this case in the formation of aro-
matics and the corresponding cycloolefins. Simultane-
(Chemistry--Organic, TT, v. 6, no. 10) (over)

- I. Plate, A. F.
- II. Tarasov, G. A.
- III. Title: Dehydrogenation ...

Office of Technical Services

Specific Weight of Aqueous Solutions of Formic and
Acetic Acids, by A. A. Galgoleva, 7 pp.

RUSSIAN, paper, Zhur Obshch Khim, Vol XV, 1945,
pp 131-134.

ABC Tr 3756

Sci - Chem

Sep 59

96,731

Shilov, E. A.
CATALYTIC INFLAMMATION OF MIXTURES OF
CHLORINE WITH ETHYLENE AND OTHER COMBUS-
TIBLE GASES. (1961) 8p. 7 pers.
Order from OHS or SLA \$1.10

61-16248

Trans. of Zhurnal Obshchei Khimii (USSR) 1945, v. 15
(no. 3) p. 135-141.

DESCRIPTION: *Chlorines, *Ethylenes, *Gases,
*Oxides, Inflammable materials, Catalysis, Ignition,
Additives, Thermochemistry, Combustion.

Inflammation of mixtures of chlorine with ethylene was
studied in the presence of various volatile and non-
volatile additives. Oxides of mercury, silver and lead
pronouncedly reduce the inflammation temperature.
Mixtures of ethylene and chlorine explode even at room
temperature on mercurous and mercuric oxides, on
(Chemistry--Physical, TT, v. 6, no. 10) (over)

61-16248

I. Shilov, E. A.

187239

Office of Technical Services

62-10854

JOURNAL OF GENERAL CHEMISTRY, 1945, VOL. 15,
NO. 3: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS]. [1962] 8p. 6 refs.
Order from OTS or SLA \$1.10

62-10854

Abstract trans. of Zhurnal Obshchei Khimii (USSR)
1945, v. 15, no. 3, p. 152-159, 165-188, 252-258.
**Complete translations of p. 165-168 and 173-176 are
available from SLA as RT-1444 and RT-1008.

DESCRIPTORS: *Chemistry, *Abstracts, Molecular
isomerism, Methyl ethers, Hydroxides, Naphthalenes,
Quinones, Catalysts, Catalysis, Chemical reactions,
Nitrogen compounds, Oxides, Ethyl ethers, Reaction
kinetics, Styrenes, Polymerization, Rubber, Oxidation,
Propionic acids, Bromides, Esters, Nicotinic acid.

Contents:

Isomerization of dimethyl ether of 1,4-dihydro- α -naph-
(Chemistry, IT, v. 9, no. 9) (over)

- I. Title: Action of N_2O_3 ...
- II. Title: Practical...
- III. Title: Some...

Office of Technical Services

Plat. A. F.
 MECHANISM OF CONTACT CONVERSIONS OF HY-
 DROCARBONS ON A VANADIUM CATALYST. V.
 SIMULTANEOUS HYDROGENATION AND DEHYDRO-
 GENATION OF CYCLOOLEFINS (CYCLOHEXENE
 AND CYCLOPENTENE) (Mekhanizm Kontaktnykh
 Prevrashteniy Uglevodorodov na Vantdievom
 Katalizatore). [1958] 107, 34 refs.
 Order from OTS or SLA 51.10

61-18245

Trans. of Zhurnal Khimicheskoi Akhimi (USSR) 1945, v. 15
 (no. 3) p. 155-166

DESCRIPTORS: *Hydrocarbons, *Cyclohexenes,
 *Cyclopentenes, Hydrogenation, Dehydrogenation,
 Vanadium catalysts, Monocyclic compounds.

Investigation of the behavior of cyclohexene in the
 presence of vanadium trioxide on aluminum oxide as a
 catalyst revealed the diversity and complexity of the
 conversion processes which should be taken into ac-
 (Chemistry: Organic, IT, v. 6, no. 7) (over)

61-18246

- I. Title: Contact conversion
- I. Plate, A. F.
- II. Title: Simultaneous...

1958

Office of Technical Services

Zhur Obshch Khim XV, 724-8, 1945

Equilibrium in the Systems $\text{NH}_4\text{F}-\text{H}_2\text{O}$ and $\text{NH}_4\text{HF}_2-\text{H}_2\text{O}$.

V. S. Yatlov and E. M. Polyakova

(Wilson Dam 2482)

The Action of Nitrogen Oxides on Unsaturated Ethers.
Com. II. Action of H_2O_3 on Ethyl-allyl Ether,
by H. M. Maslov, 7 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XV, No 3,
1945, pp 165-168.

Sci Tr ² Center
RT-1444

Scientific - Chemistry

18,902

Polymerization of Styrene in a High Frequency Field,
by N. W. Shorygina, E. I. Petrova, 6 pp
UNCLASSIFIED

RUSSIAN, Per, Zhur Obshch Khim, Vol XV, No 3,
1945, pp 173-176.

Sci Tr Center
RT-1008

Scientific - Chemistry

15353